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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,671	10/14/2003	Herbert P. Hartgrove	PG16044P0132US	3389
32116	7590	10/12/2005	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			BEFUMO, JENNA LEIGH	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,671

Applicant(s)

HARTGROVE ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 17, 18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 17, 18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Preliminary Amendment

1. The Amendment submitted on October 14, 2003, has been entered. Claims 1 – 13, 15, 16, and 19 have been cancelled. Claim 14 has been amended and claim 20 has been added. Therefore, the pending claims are 14, 17, 18, and 20.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffers et al. (4,925,722) in view of Birch (5,458,962).

Jeffers et al. discloses a disposable semi-durable wipe produced by fluid entanglement of a carded web including polyester fibers (abstract). A carded web is inherently produced by staple fibers. The entangling member has a symmetrical pattern of void areas (column 2, lines 53 – 58). Jeffers et al. discloses that after entangling the fabric an adhesive binder including acrylic resins can be added to the fabric (column 2, lines 46 – 52) which enhances the fabric's abrasion resistance (column 2, lines 30 – 35). Jeffers et al. fails to disclose a binder comprising a acrylic copolymer and a melamine component.

Birch is drawn to nonwoven surface treating articles. Birch discloses adding a binder comprising an acrylate copolymer and melamine component (abstract). A flexible and resilient fibrous surface treating article is produced (column 2, lines 35 – 40). Birch discloses that the

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melamine crosslinking agent is added to form “hard” regions in the binder by crosslinking with the acrylate/acrylamide components (column 8, lines 8 – 15). Finally, Birch discloses that the binder is designed to bond together all types of fibers and particulate or abrasive materials, while allowing the nonwoven fabric to remain flexible during use (column 9, lines 35 – 50).

Thus, it would have been obvious to one having ordinary skill in the art to use a binder as taught by Birch in the nonwoven wipe taught by Jeffers et al. since Jeffers et al. discloses using a binder to enhance the fabric’s abrasion resistance and Birch discloses that the binder can be added to nonwoven fabrics used as surface treating articles to produce a fabric which is soft and flexible during use, but maintains the fabric’s structure and stability sufficiently during use.

Although the limitations of tensile strength and Taber abrasion are not explicitly taught by Jeffers et al. or Birch, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. a polyester staple fiber, nonwoven fabric with a thermosetting binder) and in the similar production steps (i.e. hydroentangling the staple fiber fabric and bonding the fabric with a thermosetting binder containing acrylic and melamine) used to produce the nonwoven wiping fabric. The burden is upon the Applicant to prove otherwise. Thus, claim 14 is rejected.

Claim 20 is also rejected since the wire surface used to hydroentangle the fabric would increase the ability of the fabric to retain the binder by shaping the surface and producing an increased surfaced area in the finished product.

Claims 17 and 18 recite the shape of the image transfer device used to make the nonwoven. Jeffers et al. discloses that various apertured patterns can be used to form the hydroentangled pattern in the fabric. It would have been obvious to one having ordinary skill in

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the art to choose a known hydroentangling design structure, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Therefore, claims 17 and 18 are rejected.

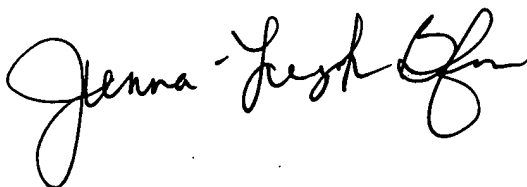
Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weber (US 2003/0194962 A1), which is drawn to a hydroentangled nonwoven fabric comprising a binder, is being made of record but is not being used as prior art since it was not filed prior to the applicant's effective filing date.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Jenna-Leigh Befumo". The signature is written in a cursive, flowing style with a large initial "J" and a stylized "B" at the end.